a routing engine forwarding a packet to a destination node of a communications network, wherein the packet traverses a particular connectionless communication path among a plurality of connectionless communication paths to the destination node; and

a probe mechanism generating and sending a probe message over the particular connectionless communication path traversed by the packet for determination of statistics of the communications network.

2. (Currently Amended) The probing router of Claim 1, wherein the probe message is sent at time T1 and said probe mechanism receives a reply probe message at a second time, T2, sent by the destination node in response to receiving said probe message with a remote latency indicator therein so that service level agreement characteristics may subsequently be derived by comparing T1, T2 and the remote latency indicator.

3. (Currently Amended) The probing router of Claim 2, further comprising:

a memory storing the service level agreement characteristics identified by the probe mechanism.

4. (Currently Amended) The probing router of Claim 1, wherein the particular connectionless communication path supports a tunnel channel in a virtual private network.

5. (Previously Amended) The probing router of Claim 2, wherein said reply probe message includes a data field specifying the remote latency indicator that represents an amount of time between when said destination node received said probe message and when said destination node sent said reply probe message.

6. (Previously Amended) The probing router of Claim 1, wherein a polling interval at which said probe mechanism sends said probe message is programmable.

7. (Previously Amended) The probing router of Claim 3, wherein said probe mechanism is configured to send at least one of T1, T2, and the remote latency indicator to a probe poller device that calculates service level agreement statistics.

8. (Previously Amended) The probing router of Claim 7, wherein said probe mechanism is configured to calculate service level agreement statistics based on T1, T2, and the remote latency, said service level agreement statistics including at least one of a network availability statistic and a packet loss rate.

9. (Currently Amended) A computer-readable medium carrying one or more sequences of one or more instructions for sending a probe message, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

generating a probe message; and

sending said probe message over a connectionless communication path among a plurality of connectionless communication paths for transporting a packet to a destination node that is reachable by any one of the plurality of connectionless communication paths.

10. (Original) The computer-readable medium according to Claim 9, wherein the probe message includes a time stamp, T1, representing when said probe message is sent in said sending step.

11. (Previously Amended) The computer-readable medium according to Claim 10, wherein when the one or more instructions are executed by the one or more processors cause the one or more processors to further perform the steps of:

receiving at a second time, T2, a reply probe message sent from the destination node; and

extracting a remote latency indicator from said reply probe message, said remote latency indicator representing an amount of time between when said destination probing router received said probe message and when said destination node sent said reply probe message.

12. (Currently Amended) The computer-readable medium of Claim 11, wherein when the one or more instructions are executed by the one or more processors cause the one or more processors to further perform the step of:

calculating service level agreement statistics associated with the particular connectionless communication path based on T1, T2, and said remote latency indicator.

13. (Currently Amended) The computer-readable medium of Claim 9, wherein the plurality of connectionless communication paths is supported by a virtual private network.

14. (Currently Amended) A communication system for gathering traffic statistics, comprising:

a probing router generating and sending a probe message and prepare performance statistics information;

a probe poller processor receiving performance statistics information collected by a probing router that generates and sends a probe message over a connectionless communication path that transports a packet to a destination node that is reachable by any one of the plurality of connectionless communication paths; and

a reporting mechanism, coupled to said probe poller processor, presenting a compilation of said performance statistics information for comparison against performance thresholds of a service level agreement.

15. (Currently Amended) The system of Claim 14, wherein the plurality of connectionless communication paths is supported by a virtual private network.

16. (Previously Amended) The system of Claim 14, wherein said probing router is located within a customer premise.

17. (Currently Amended) The system of Claim 14, wherein said reporting mechanism reports said performance statistics information in at least one of a printed form and a graphically displayed form.

18. (Currently Amended) The system of Claim 14, wherein said reporting mechanism reports said performance statistics via a web interface.

19. (Currently Amended) The system of Claim 14, further comprising:

a virtual private network builder receiving topology information regarding an assignment of probing routers to a virtual private network and produce a control signal to be distributed to respective probing routers, said probing router being one of said probing routers.

20. (Previously Amended) The system of Claim 19, wherein said control signal includes a polling interval indicator that sets a polling interval at which said probing router sends said probe message.

21. (Currently Amended) The system of Claim 14, wherein said probe poller processor calculates at least one of an availability and a packet loss rate of the connectionless communication path from said performance statistics information.

22. (Currently Amended) A probing router, comprising:

means for routing data packets to a destination router reachable over a plurality of connectionless communication paths within a virtual private network;

means for generating and sending a probe message over one of the plurality of connectionless communication paths to the destination router, the one connectionless communication path transporting the data packets; and

an enclosure that houses said means for routing and said means for preparing and sending.

23. (Currently Amended) A method for collecting network performance statistics, comprising the steps of: